

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Application No. 09/769/407
Attorney Docket No. Q62879

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A code division multiple access (CDMA) receiver comprising a searcher for preparing a delay profile in received CDMA signals that indicates a plurality of radio propagation paths to produce path information identifying main propagation paths, said CDMA receiver comprising:

path monitoring means for monitoring the path information from said searcher to produce a detection signal when said main propagation paths are stable for a predetermined time interval; and

searcher operation controlling means for controlling, in response to said detection signal, said searcher to make said searcher intermittently operate at a predetermined intermittent period,

wherein said path monitoring means includes:

path information memory means for storing current path information from said searcher as stored path information;

path comparing means for comparing said stored path information with said current path information, said path comparing means producing a path coincidence signal when said stored path information coincides with the current path information; and

path coincidence counting means for counting, in response to said path coincidence signal, a path coincidence count,

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said monitoring means producing said detection signal when said path coincidence count reaches a predetermined count.

2. (currently amended). A CDMA receiver as claimed in claim 1, wherein ~~said path monitoring means including:~~

~~path information memory means for storing current path information from said searcher as stored path information;~~

~~path comparing means for comparing said stored path information with said current path information, said path comparing means producing a path coincidence signal when said stored path information coincides with the current path information, said path comparing means producing produces a path inconsistency signal when said stored path information coincides with the current path information; and~~

~~path coincidence counting means for counting, in response to said path coincidence signal, a path coincidence count, said path coincidence counting means initializing initializes, in response to said path inconsistency signal, said path coincidence count to an initial count;~~

~~said monitoring means producing said detection signal when said path coincidence count reaches a predetermined count.~~

3. (original): A CDMA receiver as claimed in claim 2, wherein said initial count is equal to one.

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4. (currently amended) A method of reducing power consumption in a code division multiple access (CDMA) receiver comprising a searcher for preparing a delay profile in received CDMA signals that indicates a plurality of radio propagation paths to produce path information identifying main propagation paths, said method comprising the steps of:

monitoring the path information from said searcher to produce a detection signal when said main propagation paths are stable for a predetermined time interval; and
controlling, in response to said detection signal, said searcher to make said searcher intermittently operate at a predetermined intermittent period,

wherein the monitoring step comprises the steps of:

storing, in a path information memory, current path information from said searcher as stored path information;

comparing said stored path information with said current path information to produce a path coincidence signal when said stored path information coincides with the current path information;

counting, in response to said path coincidence signal, a path coincidence count, and producing said detection signal when said path coincidence count reaches a predetermined count.

5. (canceled).

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6. (currently amended): A method as claimed in claim 54, wherein the comparing step produces a path inconsistency signal when said stored path information coincides with the current path information, and the counting step initializing, in response to said path inconsistency signal, said path coincidence count to an initial count.

7. (original): A method as claimed in claim 6, wherein said initial count is equal to one.

8-12. (canceled).

13. (previously presented): The receiver as claimed in claim 1, wherein said main propagation paths are stable for a predetermined time interval when previously identified main propagation paths coincide with currently identified main propagation paths throughout said predetermined time interval.

14. (previously presented): The method as claimed in claim 4, wherein said main propagation paths are stable for a predetermined time interval when previously identified main propagation paths coincide with currently identified main propagation paths throughout said predetermined time interval.

15. (currently amended): A receiver, comprising:
a searcher;

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a path monitoring means; and

a searcher operation controlling means;

wherein said searcher periodically searches to identify main propagation paths, said path monitoring means generates a detection signal when said main propagation paths have not changed for a predetermined period of time, and said searcher operation controller means reduces the frequency of searches upon said in accordance with said detection signal, and
wherein current path information is compared with previously stored path information
and a path coincidence signal is produced when said previously stored path information
coincides with said current path information, said path monitoring means counts a number of
coincidence signals produced and generates said detection signal when said count reaches a
predetermined number.

16. (currently amended): A method of receiving a transmission signal, comprising:
periodically searching a received multipath signal;
identifying main propagation paths in said searched signal;
monitoring said identified main propagation paths; and
reducing the frequency of said searching in accordance with a detection signal when said identified main propagation paths have not changed for a predetermined period of time,
wherein said monitoring comprises:
storing current path information as stored path information;

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comparing said stored path information with current path information and producing a path coincidence signal when said stored path information coincides with said current path information;

incrementing a path coincidence count in response to said produced path coincidence signals; and

generating said detection signal when said path coincidence count reaches a predetermined number.

17. (new): The method as claimed in claim 16, further comprising:
producing a path inconsistency signal when said stored path information does not coincide with said current path information; and
initializing said path coincidence count to an initial number in response to said path inconsistency signal.